

FIG. 1

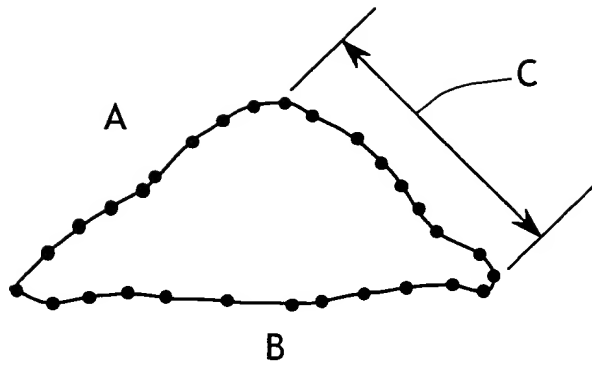


FIG. 2

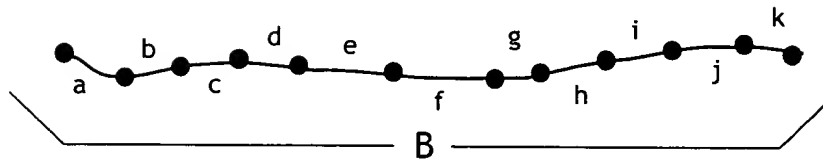


FIG. 3

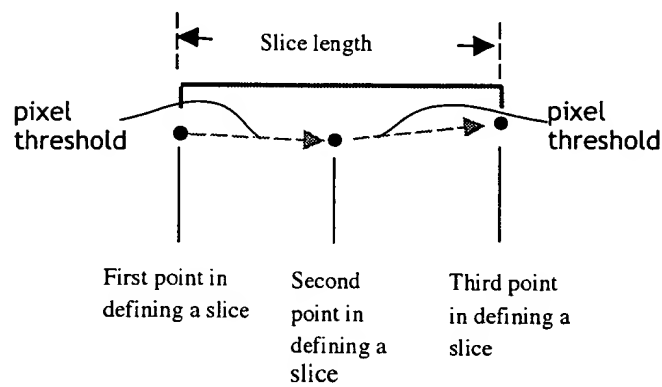


FIG. 4

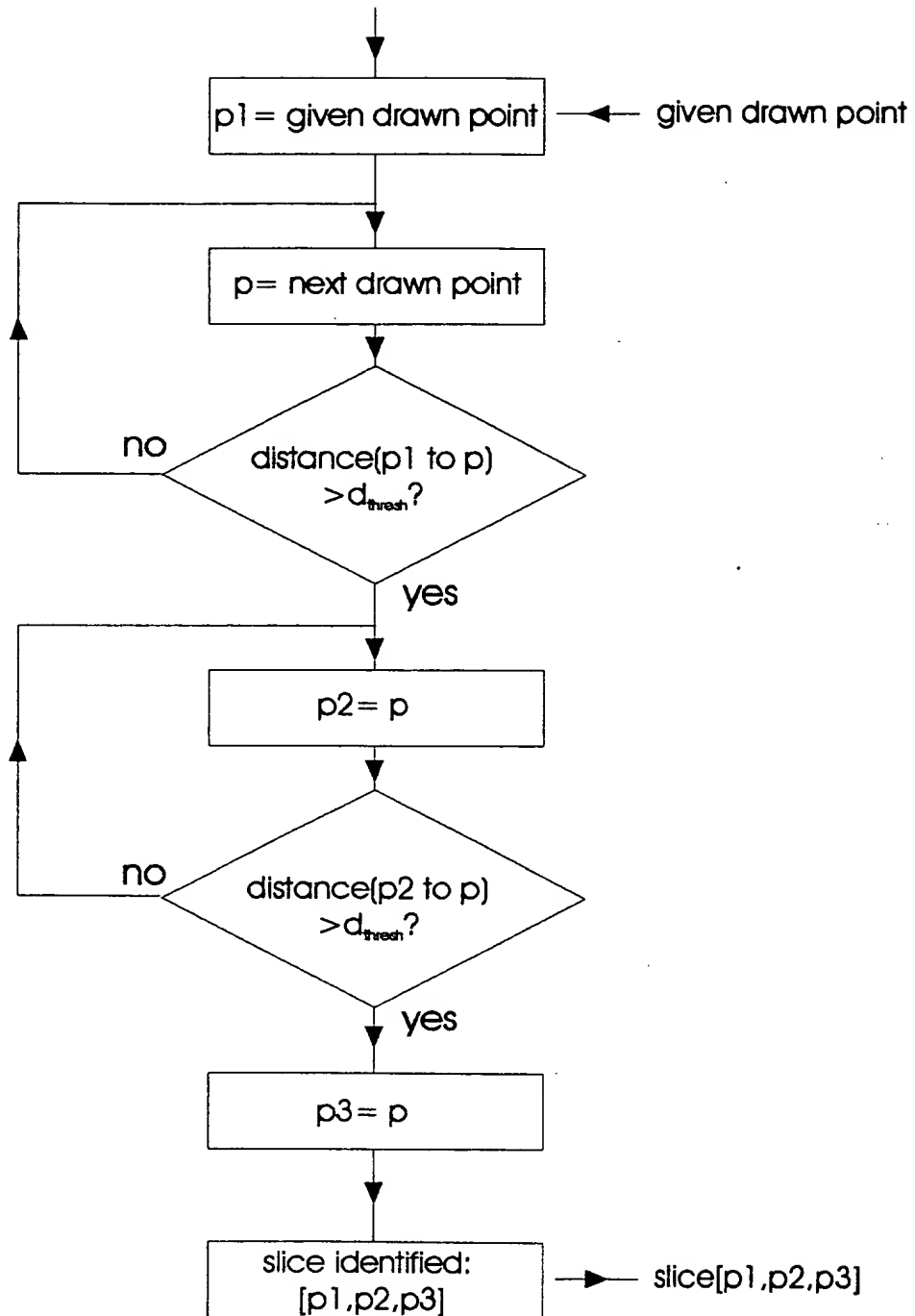


FIG. 5

Deviation threshold default
= [magicnum 35 degrees]

IDENTIFY SLICE FROM
GIVEN DRAWN
POINT WITHIN DRAWN
POINT SEQUENCE

p

slice[p1,p2,p3]

IDENTIFY SLICE FROM
GIVEN DRAWN
POINT WITHIN DRAWN
POINT SEQUENCE

p

slice[p1,p2,p3]

FINISH

ANALYSE
STROKE

p = drawn stroke start point
pstart = drawn stroke start point

threshangle = deviation threshold
lastDeltAngle = unknown

identify slice starting
from p
if end of stroke FINISH

deltangle =
abs(angle(p2 to p3)
- angle(p1 to p2))

deltangle
> threshangle?

yes

pVertex = p2

p = next drawn point
if end of stroke FINISH

lastdeltangle = deltangle

identify slice starting
from p

deltangle =
abs(angle(p2 to p3)
- angle(p1 to p2))

deltangle
> lastdeltangle?

yes

no

define segment
[from ps to p2]

add segment to segment
list for this stroke

p = pVertex

pstart = pVertex

p = next drawn point
if end of stroke FINISH

if lastdeltangle < [magicNum 10]
AND deltangle < lastdeltangle
AND threshangle < [magicNum 25]:
decrement threshangle by
[magicNum 1]
lastdeltangle = deltangle

startPoint,endpoint

segment

DEFINE
& ANALYSE
SEGMENT

FIG. 6A

From FIG. 6A

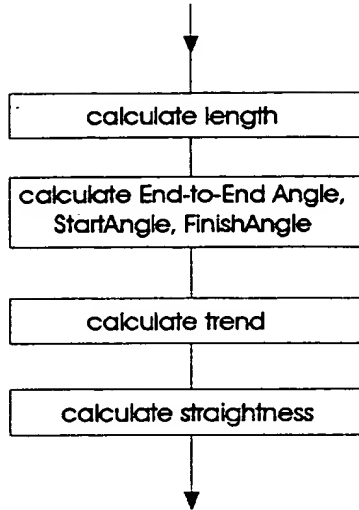


FIG. 6B

From FIG. 6A

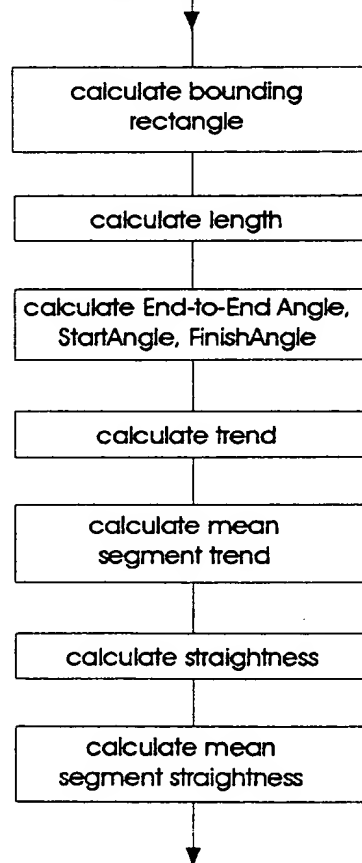


FIG. 6C

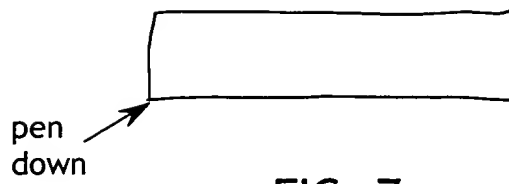


FIG. 7

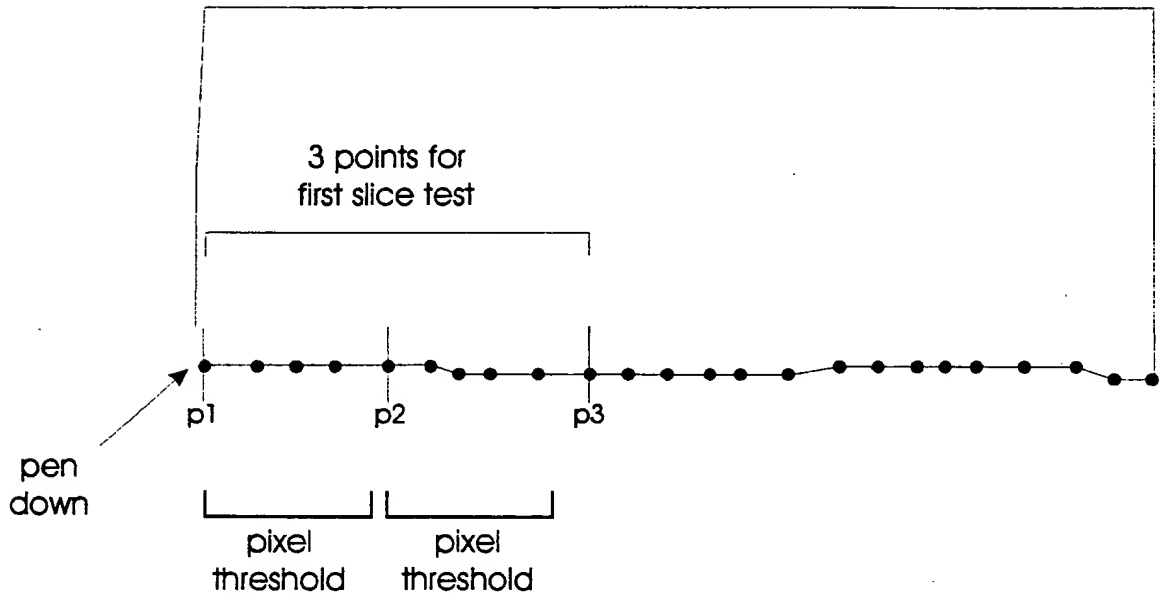


FIG. 8

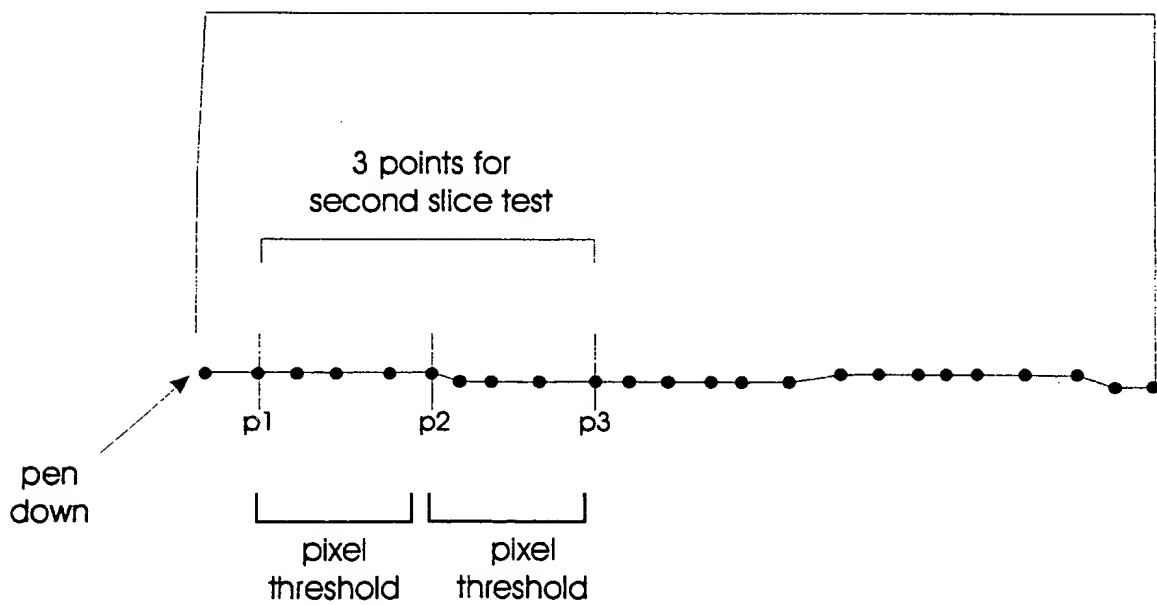


FIG. 9

- = first point of the slice
- = 2nd point of the slice
- ★ = 3rd point of the slice

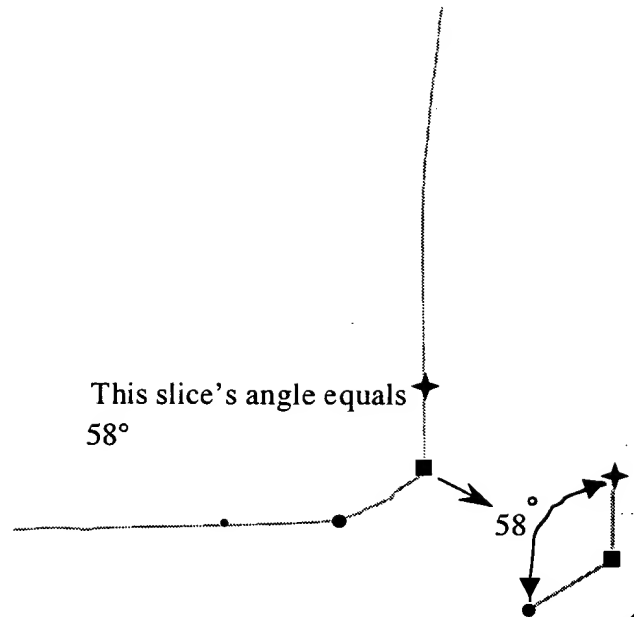


FIG. 10

- = first point of the slice
- = 2nd point of the slice
- ★ = 3rd point of the slice

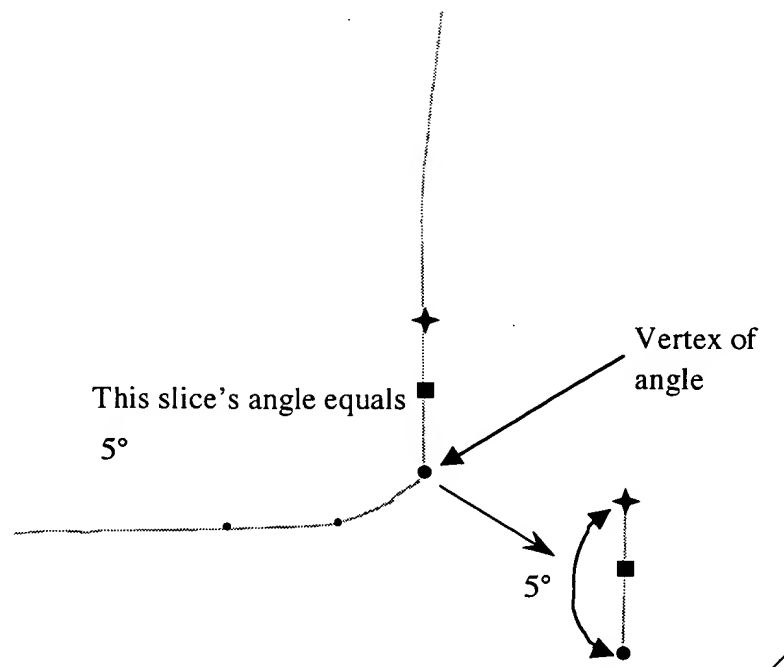


FIG. 11

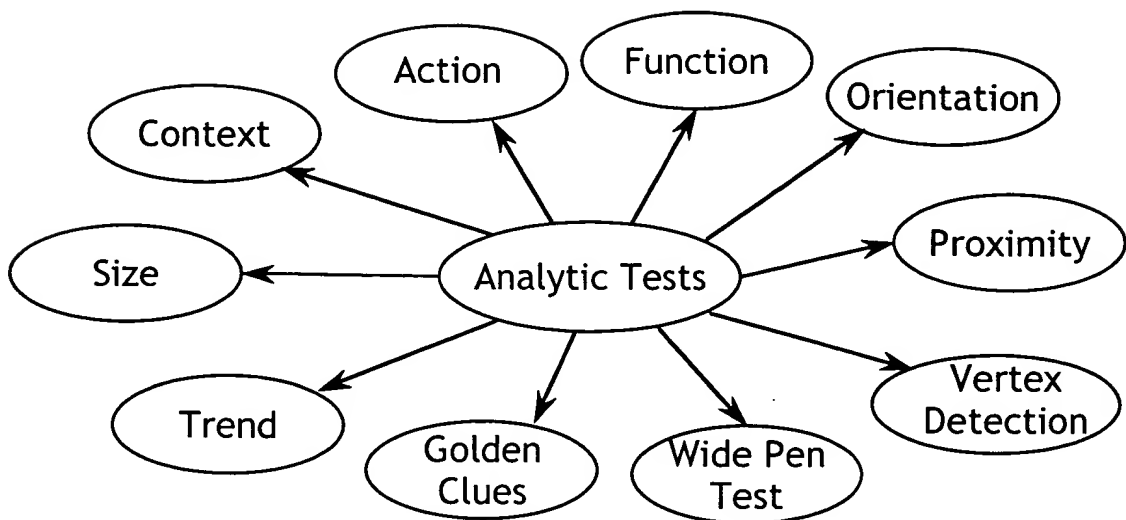


FIG. 12

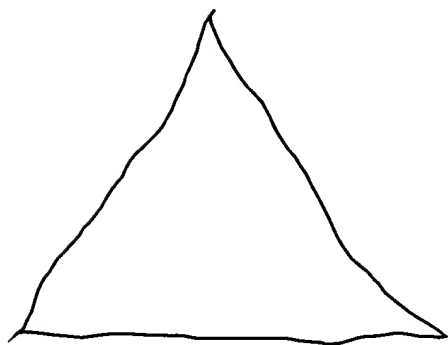


FIG. 13A

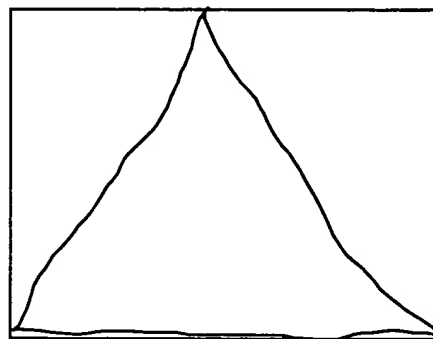


FIG. 13B

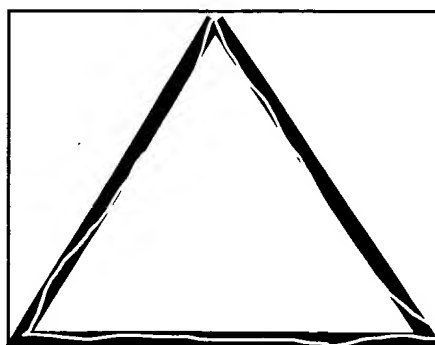


FIG. 13C



FIG. 14A



FIG. 14B



FIG. 14C

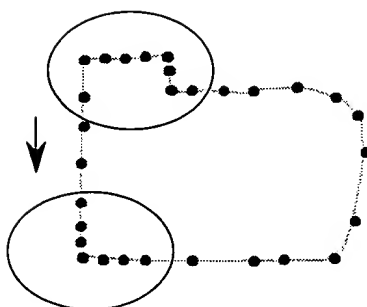


FIG. 15

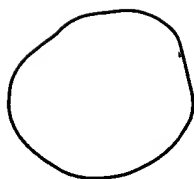


FIG. 16



FIG. 17



FIG. 18



FIG. 19

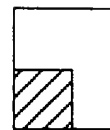


FIG. 20

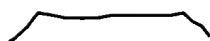


FIG. 21A



FIG. 21B

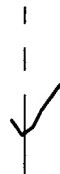


FIG. 22A



FIG. 22B

Partial List of Objects












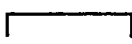



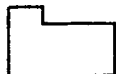
Hand drawn	Recognized Symbol	Definition	Assignment	Action
		Knob	Boost/cut Control for Equalizer	Clockwise=Up CCW=Down
		Switch	Equalizer Control	Switch an EQ In/Out Touch=IN Touch=Out
		Fader Controller	Audio Channel	Control Volume: Up=Louder Down=Softer
		User Defined	User Defined	User Defined
		User Defined	User Defined	User Defined
		Bracket (Combine)		
		Bracket (Chop)	Audio Waveform	Cut Away Waveform
		Folder (DSP process)	User Defined	User Defined

FIG.23



Four band parametric equalizer.

FIG. 24A



Four band parametric equalizer.

FIG. 24B

3 band parametric equalizer

.91



Bandwidth

3kHz



Frequency

+3dB



Boost/cut

.661



Bandwidth

10kHz



Frequency

+2dB



Boost/cut

.281



Bandwidth

122Hz



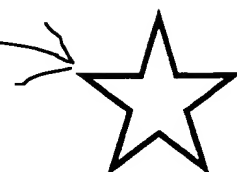
Frequency

+1dB



Boost/cut

FIG. 24C








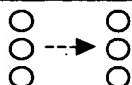



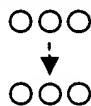




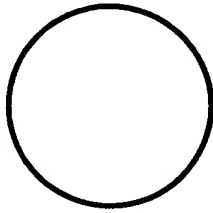
Current Equalizer: Parametric 		EQ type	UIP Layout																						
Type 	Bands <input type="text" value="6"/>		Show 1st vertical row 																						
Controls <input type="text" value="8"/>	Slope <input type="text" value="18dB/Oct"/>		Show all vertical rows 																						
B/C <input type="text" value="-18 to +18"/>	Fq <input type="text" value="10Hz - 16kHz"/>		Show 1st horizontal row 																						
BW <input type="text" value="0.0 - 1.00"/>	Att <input type="text" value="50us - 1sec"/>		Show all horizontal rows 																						
Dec <input type="text" value="1ms - 1sec"/>	Env <input type="text" value="Compress"/>																								
Ratio <input type="text" value="4:1"/>	Thres <input type="text" value="0dB to +25dB"/>																								
Summaries/Abbreviations: <table border="0"> <tr> <td>Controls:</td> <td>Range:</td> </tr> <tr> <td>1. B/C - Boost/cut)</td> <td>1. -60dB to +60dB</td> </tr> <tr> <td>2. Fq - Frequency</td> <td>2. DC - 40kHz</td> </tr> <tr> <td>3. B/W - Bandwidth</td> <td>3. 0.0 - 1.00</td> </tr> <tr> <td>4. Att - Attack</td> <td>4. 15us - 10 sec</td> </tr> <tr> <td>5. Dec - Decay</td> <td>5. 15us - 10sec</td> </tr> <tr> <td>6. S lope - dB/Octave</td> <td>6. shelf to 60dB/Oct</td> </tr> <tr> <td>7. F orm - Bessel, etc.</td> <td>7. Bessel + 3 others</td> </tr> <tr> <td>8. V ol Envelope</td> <td>8. Compress or expand</td> </tr> <tr> <td>9. R atio</td> <td>9. 0:0 - 30:1</td> </tr> <tr> <td>10. Thresh hold</td> <td>10. -30dB - +60dB</td> </tr> </table>		Controls:	Range:	1. B/C - Boost/cut)	1. -60dB to +60dB	2. Fq - Frequency	2. DC - 40kHz	3. B/W - Bandwidth	3. 0.0 - 1.00	4. Att - Attack	4. 15us - 10 sec	5. Dec - Decay	5. 15us - 10sec	6. S lope - dB/Octave	6. shelf to 60dB/Oct	7. F orm - Bessel, etc.	7. Bessel + 3 others	8. V ol Envelope	8. Compress or expand	9. R atio	9. 0:0 - 30:1	10. Thresh hold	10. -30dB - +60dB		Show 1 device that represents all EQ controls
Controls:	Range:																								
1. B/C - Boost/cut)	1. -60dB to +60dB																								
2. Fq - Frequency	2. DC - 40kHz																								
3. B/W - Bandwidth	3. 0.0 - 1.00																								
4. Att - Attack	4. 15us - 10 sec																								
5. Dec - Decay	5. 15us - 10sec																								
6. S lope - dB/Octave	6. shelf to 60dB/Oct																								
7. F orm - Bessel, etc.	7. Bessel + 3 others																								
8. V ol Envelope	8. Compress or expand																								
9. R atio	9. 0:0 - 30:1																								
10. Thresh hold	10. -30dB - +60dB																								
			Draw EQ icon below 																						

FIG. 24D

Current Compressor/Lim: Multi-band		Mode	UIP Layout																						
Type Multi-band	Mode Compress		Show 1st vertical row																						
Ratio 4:1	Amt 0 – 100%		Show all vertical rows																						
Thres +22dB	Frequency Bands 3		Show 1st horizontal row																						
BW 0.0 – 1.00	Att 50us – 1sec		Show all horizontal rows																						
Dec 1ms - 1sec	Env Compress																								
Ratio 4:1	Thres 0dB to +25dB																								
<p align="center">Summaries/Abbreviations:</p> <table border="0"> <tr> <td>Controls:</td> <td>Range:</td> </tr> <tr> <td>1. B/C - Boost/cut)</td> <td>1. -60dB to + 60dB</td> </tr> <tr> <td>2. Fq - Frequency</td> <td>2. DC - 40kHz</td> </tr> <tr> <td>3. B/W - Bandwidth</td> <td>3. 0.0 - 1.00</td> </tr> <tr> <td>4. Att - Attack</td> <td>4. 15us - 10 sec</td> </tr> <tr> <td>5. Dec - Decay</td> <td>5. 15us - 10sec</td> </tr> <tr> <td>6. S lope - dB/Octave</td> <td>6. shelf to 60dB/Oct</td> </tr> <tr> <td>7. F orm - Bessel, etc.</td> <td>7. Bessel + 3 others</td> </tr> <tr> <td>8. V ol Envelope</td> <td>8. Compress or expand</td> </tr> <tr> <td>9. R atio</td> <td>9. 0:0 - 30:1</td> </tr> <tr> <td>10. Thresh hold</td> <td>10. -30dB - +60dB</td> </tr> </table>		Controls:	Range:	1. B/C - Boost/cut)	1. -60dB to + 60dB	2. Fq - Frequency	2. DC - 40kHz	3. B/W - Bandwidth	3. 0.0 - 1.00	4. Att - Attack	4. 15us - 10 sec	5. Dec - Decay	5. 15us - 10sec	6. S lope - dB/Octave	6. shelf to 60dB/Oct	7. F orm - Bessel, etc.	7. Bessel + 3 others	8. V ol Envelope	8. Compress or expand	9. R atio	9. 0:0 - 30:1	10. Thresh hold	10. -30dB - +60dB		
		Controls:	Range:																						
		1. B/C - Boost/cut)	1. -60dB to + 60dB																						
		2. Fq - Frequency	2. DC - 40kHz																						
3. B/W - Bandwidth	3. 0.0 - 1.00																								
4. Att - Attack	4. 15us - 10 sec																								
5. Dec - Decay	5. 15us - 10sec																								
6. S lope - dB/Octave	6. shelf to 60dB/Oct																								
7. F orm - Bessel, etc.	7. Bessel + 3 others																								
8. V ol Envelope	8. Compress or expand																								
9. R atio	9. 0:0 - 30:1																								
10. Thresh hold	10. -30dB - +60dB																								
			Draw C/Lim icon below																						

FIG. 24E

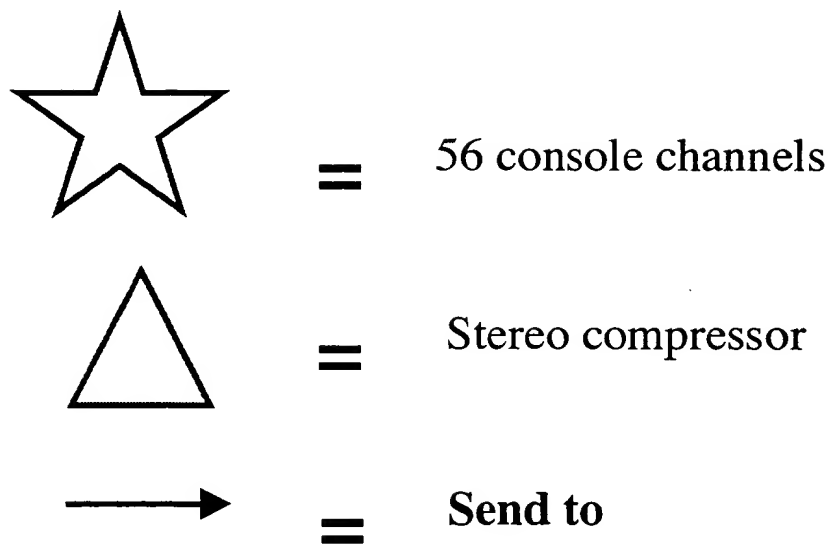


FIG. 25A

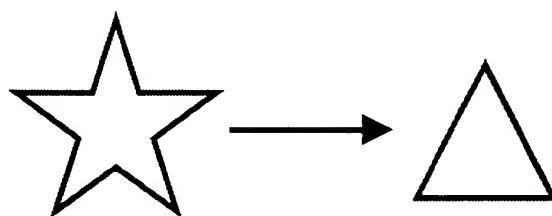


FIG. 25B

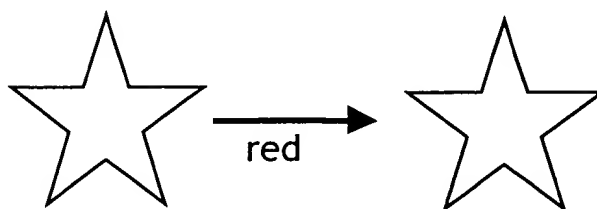


FIG. 25C

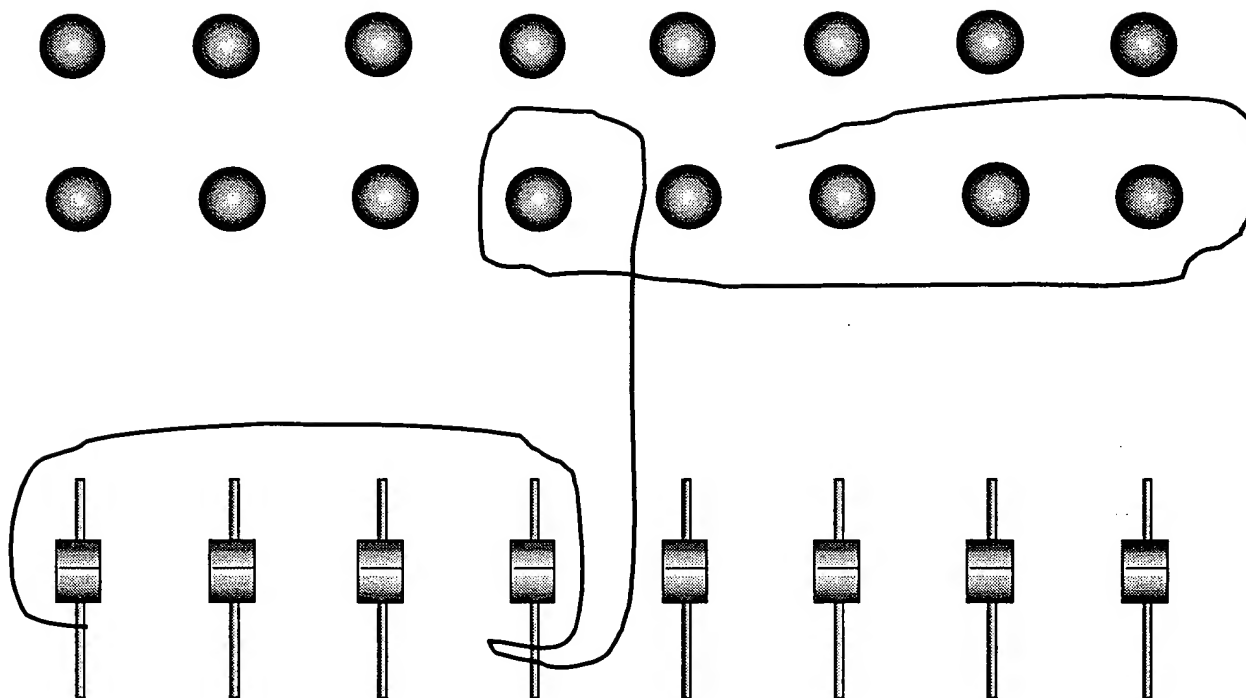


FIG.26A

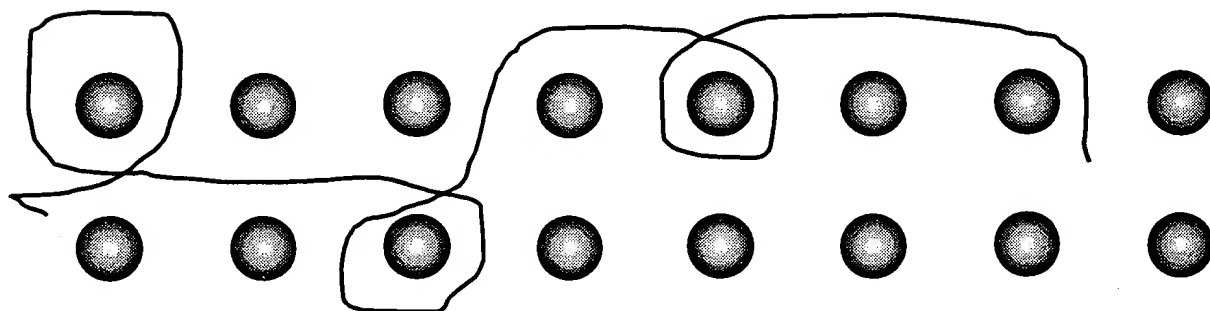


FIG.26B

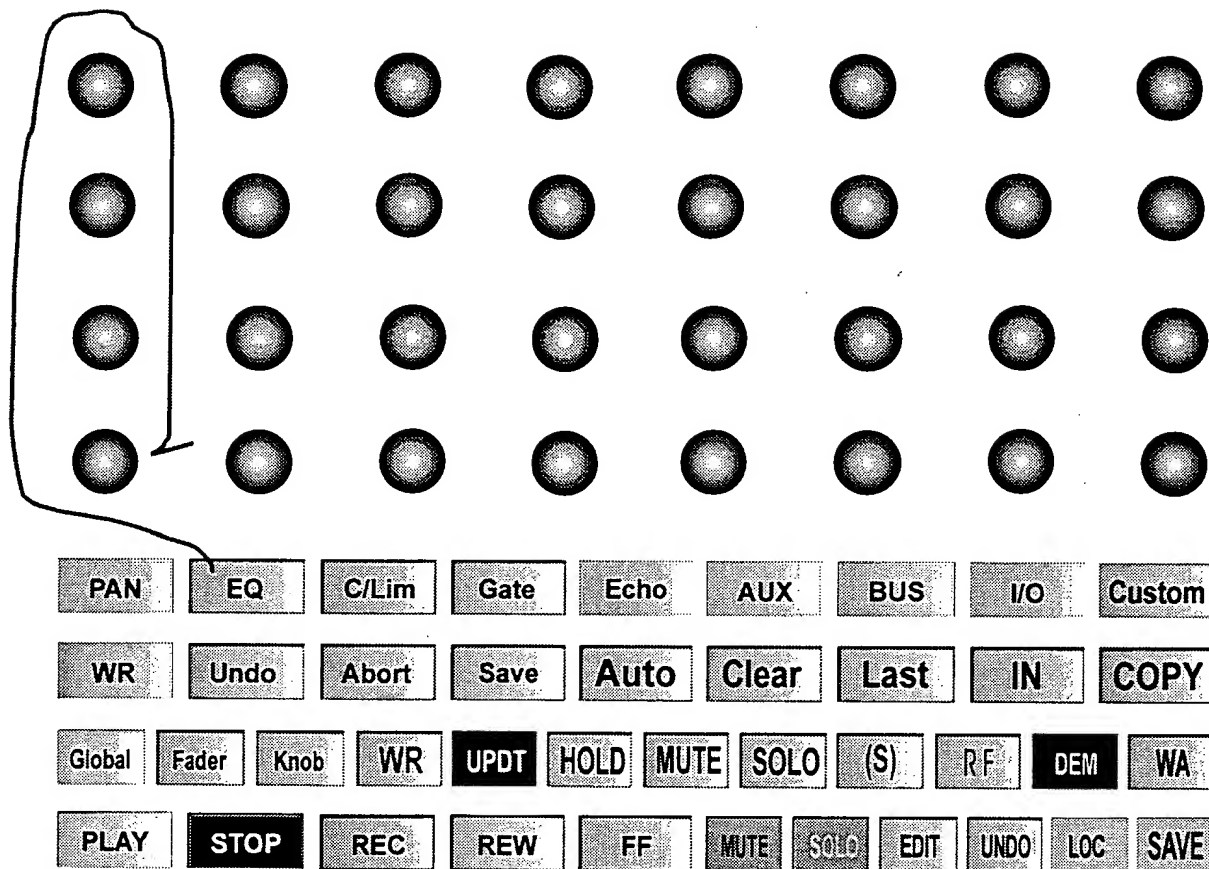


FIG. 27

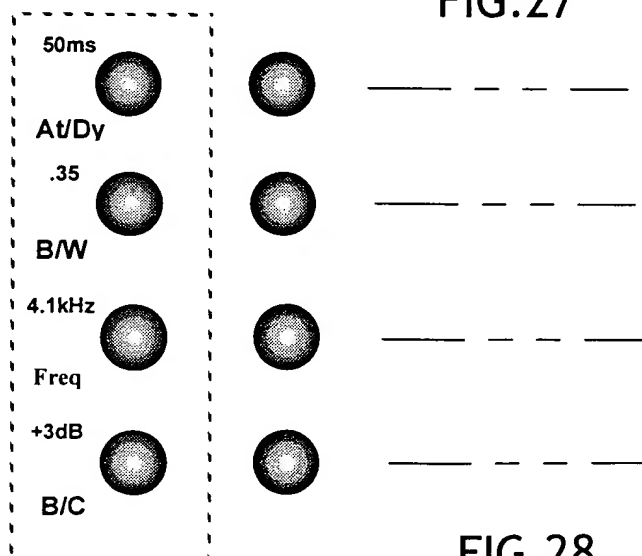


FIG. 28

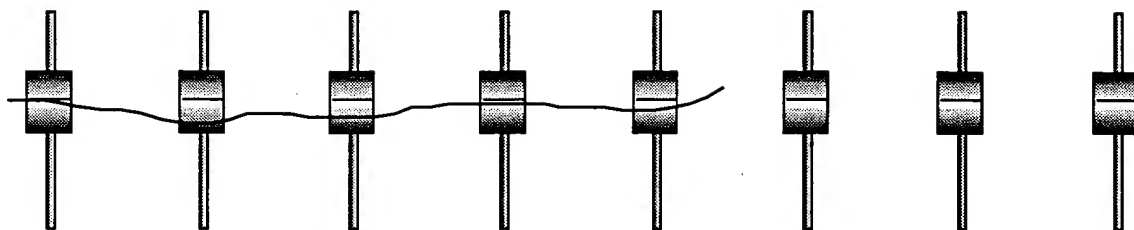


FIG. 29

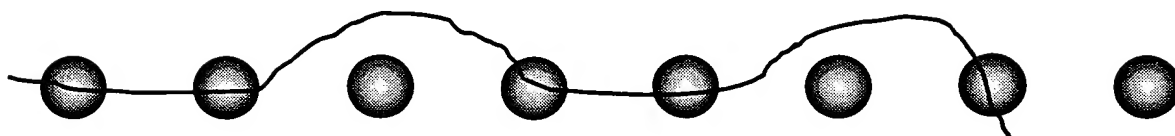


FIG. 30

FIG. 31

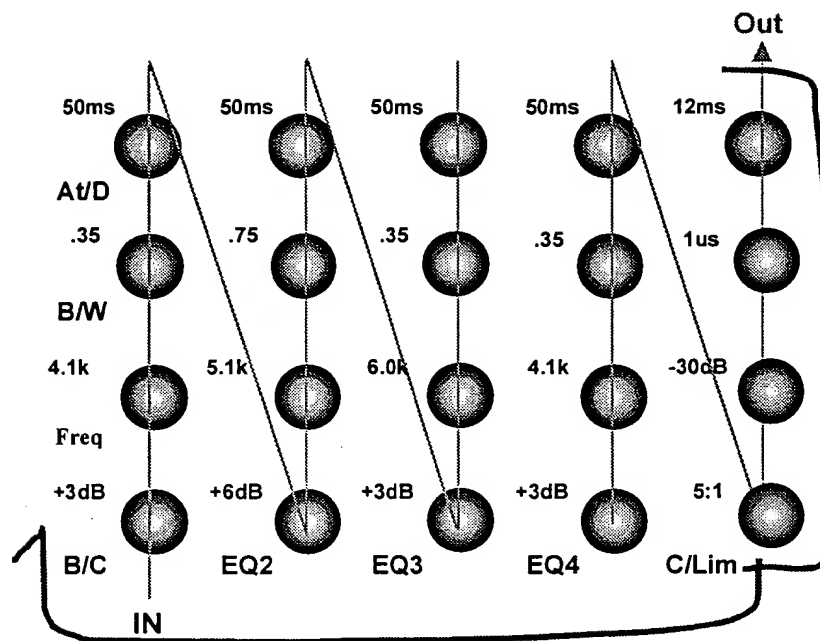


FIG.31

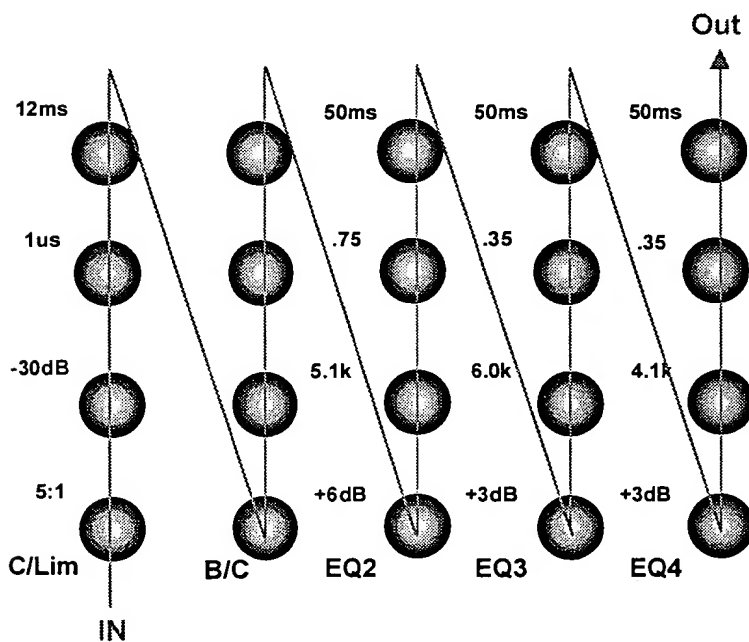


FIG.32

FIG. 33

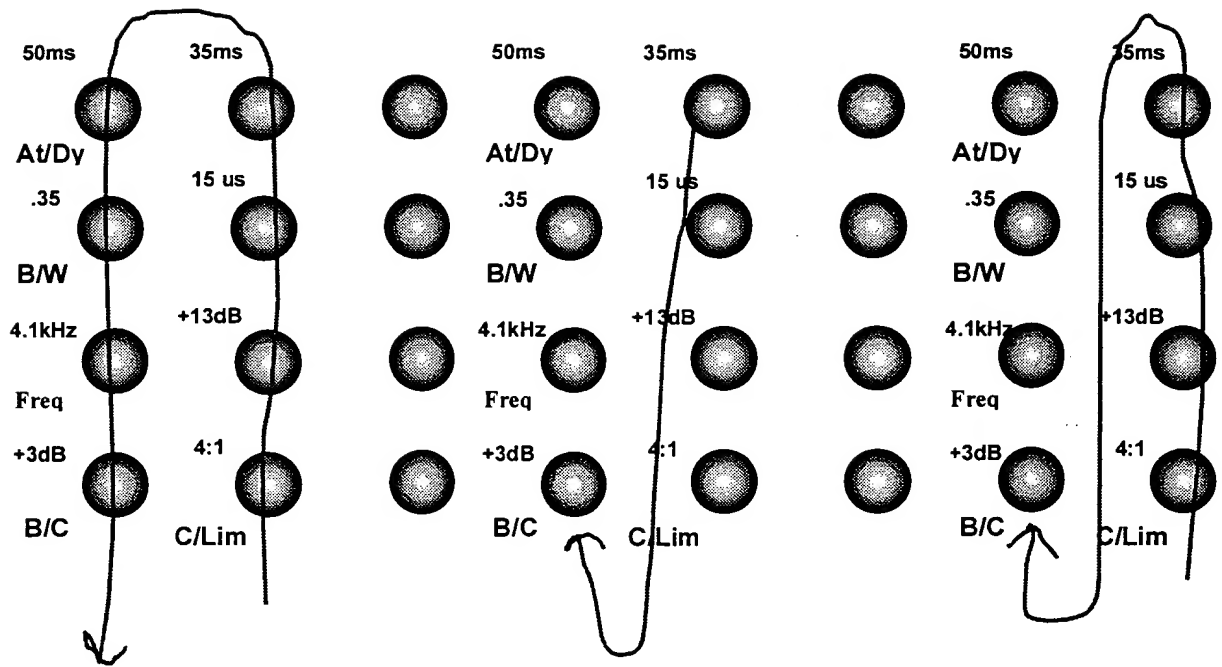


FIG. 33

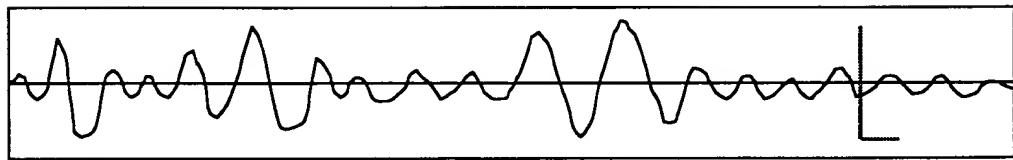


FIG. 34



FIG. 35

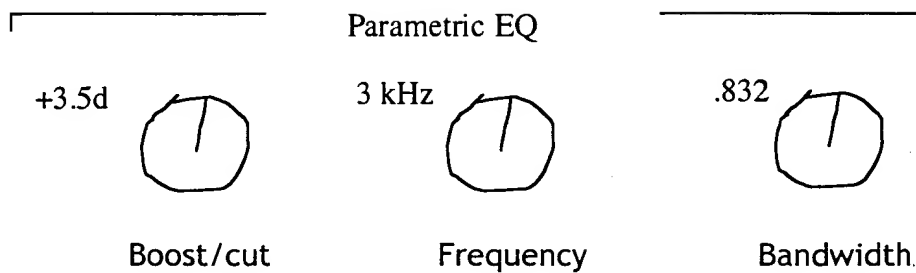


FIG. 36

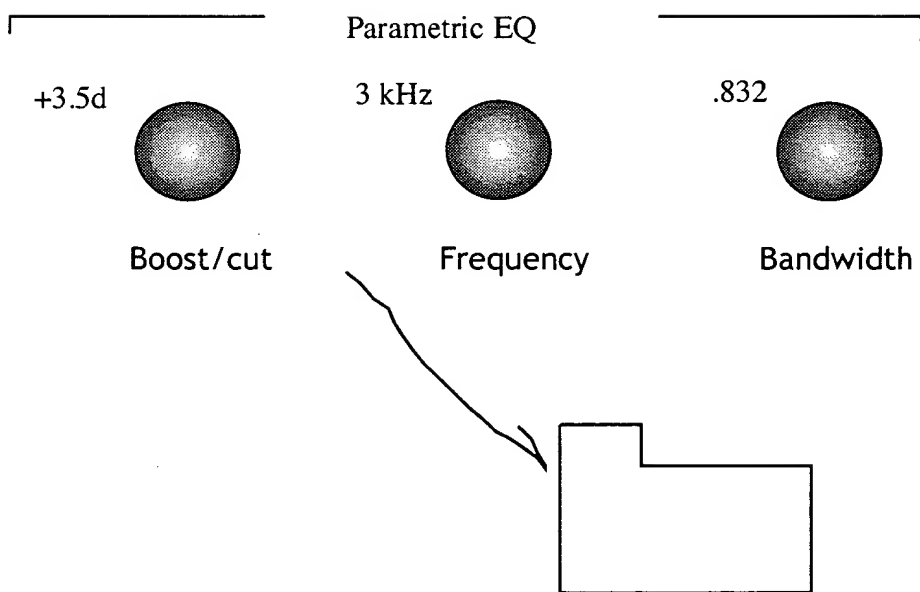


FIG. 37

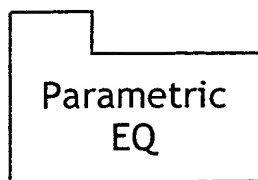
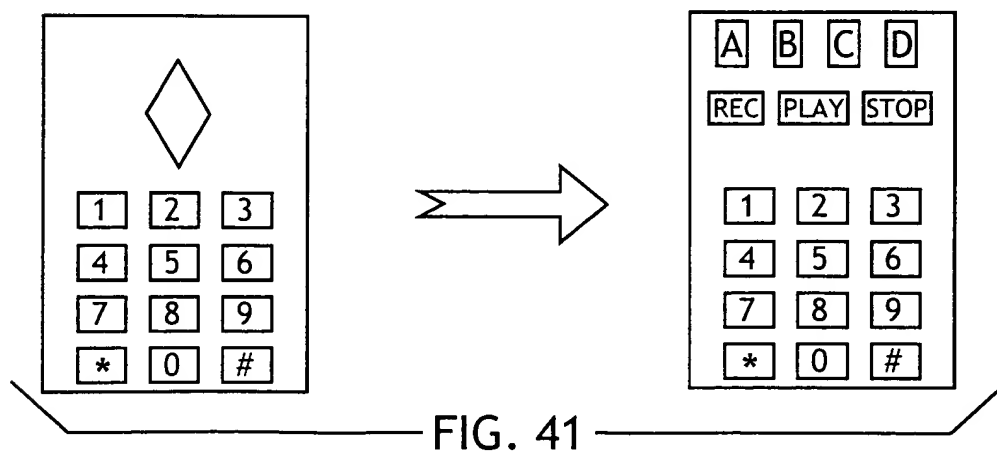
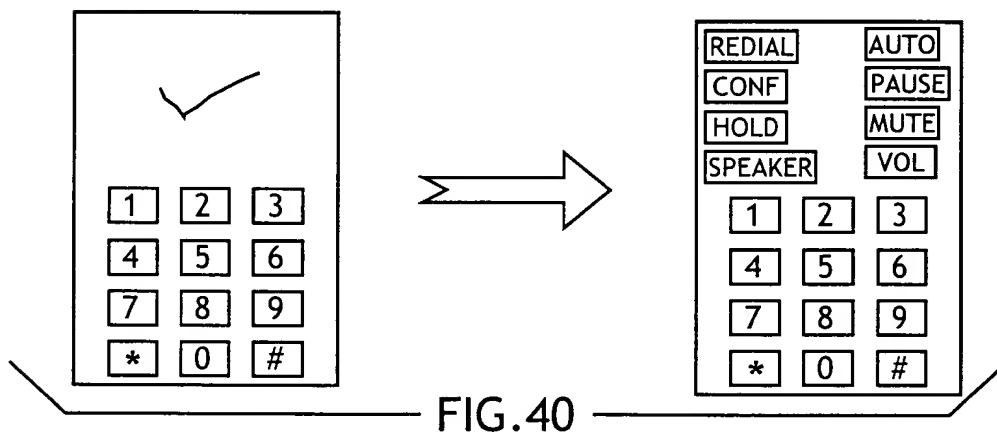
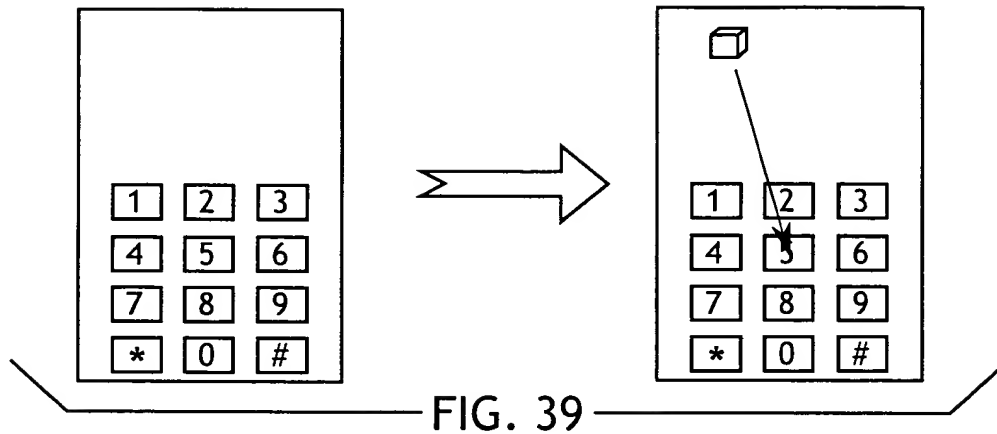


FIG. 38



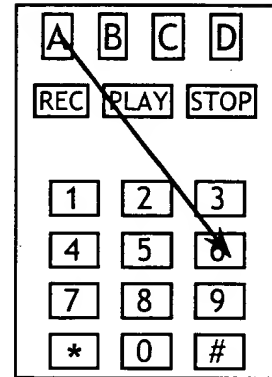
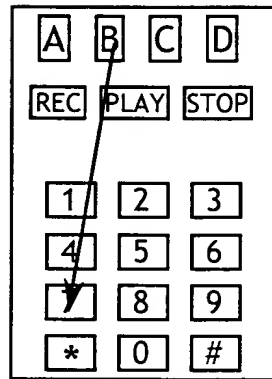


FIG. 42

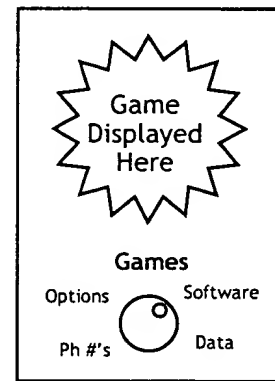
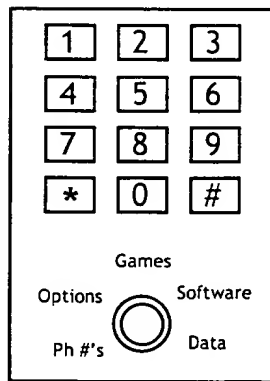


FIG. 43

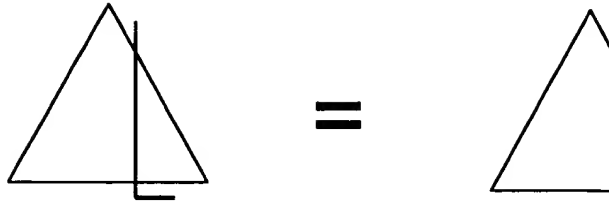


FIG. 44A

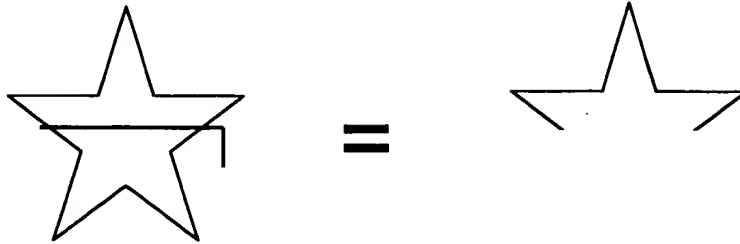


FIG. 44B

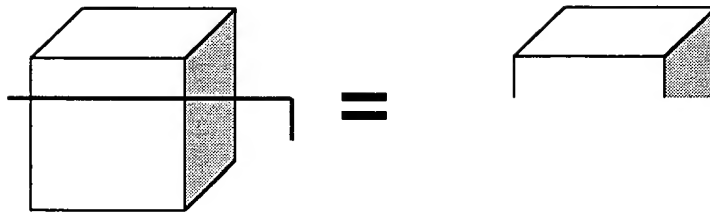


FIG. 44C

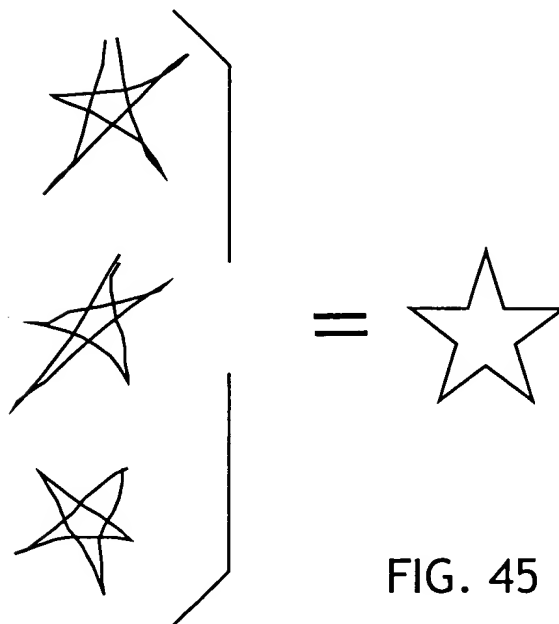


FIG. 45